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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,168	11/25/2003	Yash Sinha	2002-039	1167
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U.S. ARMY TACOM-ARDEC ATTN: AMSTRA-AR-GCL BLDG 3 PICATINNY ARSENAL, NJ 07806-5000			POLLICOFF, STEVEN B	
			ART UNIT	PAPER NUMBER
			3728	

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/707,168	<b>Applicant(s)</b> SINHA ET AL.	
	<b>Examiner</b> Steven B. Pollicoff	<b>Art Unit</b> 3728	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 and 04 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                             | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: reference number 86 paragraph [0030] line 20 does not appear in any of the submitted drawings. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Alternatively, Applicant may choose to delete the reference number. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. The disclosure is objected to because of the following informalities: See paragraph [0025] of the specification. There are inconsistencies with the elements of the packaging and the reference numbers associated with them. See line 8 and the element "bottom ring 42"; Line 9 element "bottom ring 28"; Line 12-14 element "end

Art Unit: 3728

plate 42"; The "bottom ring" should have reference number 26 as previously disclosed in the specification. "End plate" should have reference number 40 as previously disclosed. Reference number 28 refers to the "middle impact ring" and 42 refers to "cap top ring". Additionally see paragraph [0027] and the sentence beginning, "While not shown in detail..." The sentence is fragmented and incomplete as presented. See paragraph [0030] line 26, the element "second top member 82" is inconsistent as the reference number "82" was already used to identify the "first top member". "Second top member" should have the reference number "88" associated with it as previously disclosed in the specification. Appropriate correction is required.

### ***Claim Objections***

3. Claim 7 is objected to because of the following informalities: Claim 7 depends from itself. For examination purposes the examiner will consider claim 7 to depend from claim 1. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 1,2,4,6,7,8,9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moraine et al., (US Pat No 5,779,031) in view of Baumgardner (US Pat No 4,643,302) and LaBianca et al., (US Pat No 4,733,773).

As to claim 1, Moraine discloses packaging for a single ammunition comprising a generally cylindrical container (Moraine Fig. 6, reference number 55), including an open top end (Fig. 6 where reference number 71 is inserted into 55), a closed bottom end (Fig. 6, reference number 56), a cap (Fig. 6, reference number 57), a guiding mechanism (Fig. 6 spiraling grooves at the open top end of reference number 55) to guide the cap over the top end and a plurality of impact rings (Fig. 6. see the octagonal rings extending laterally from the cylindrical container 55 located adjacent the closed bottom end [container bottom ring] and open top end [cap top ring]). Moraine does not disclose that the package is made of metal, that there is a locking mechanism to lock the cap to the top end, or that there is a stacking mechanism including a first top member and a second top member located adjacent the cap top ring of the cap and located 180 degrees from one another about the cap such that the first top member interlocks with the second top member of an adjacent cap. Moraine also does not

Art Unit: 3728

disclose a stacking mechanism with a first bottom member and a second bottom member located adjacent the bottom end of the container and located 180 degrees from one another about the container such that the first bottom member interlocks with the second bottom member of an adjacent container. However, Baumgardner discloses a metal sports container (Baumgardner Column 4, lines 30-31) that protects valuable equipment from damage during transportation (Column 1, lines 48-55). Baumgardner also discloses draw catches/locking mechanisms (Fig. 8) to lock the cap to the top end for the purpose of removably securing the end caps to the container (Column 3, lines 20-26). LaBianca discloses an ammunition container with a stacking mechanism including a first top member (LaBianca Fig. 1, reference number 62) and a second top member (Fig. 1, reference number 60) located adjacent the cap top ring (Fig. 1, reference number 44) of the cap (Fig. 1, reference number 24) and located 180 degrees from one another about the cap such that the first top member interlocks with the second top member of an adjacent cap (Fig. 11). LaBianca also discloses that the stacking mechanism also has a first bottom member (Fig. 1, reference number 62 as applied to block/impact ring 46) and a second bottom member (Fig. 1, reference number 60 as applied to block/impact ring 46) located adjacent the bottom end of the container and located 180 degrees from one another about the container such that the first bottom member interlocks with the second bottom member of an adjacent container (Fig. 11). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the plastic packaging of Moraine with one made of metal, as taught by Baumgardner, for the purpose of better protection from damage



Art Unit: 3728

during storage or transport. It would have also been obvious to modify the Moraine cap to include a locking mechanism, as taught by Baumgardner, for the purpose of better securing the ammunition in a sealed container. Additionally, it would have been obvious to modify the Moraine packaging to include a stacking mechanism on the impact rings, as taught by LaBianca, for the purpose of better stability and more efficient storage of the containers in bulk (LaBianca Column 2, lines 5-11).

As to claim 2, Moraine does not disclose a handle attached to the container along its longitudinal axis or a removable and adjustable shoulder strap. However, Baumgardner discloses a handle along the longitudinal axis of the container (Baumgardner Fig. 12, reference number 25) for hand carrying and an adjustable and removable strap capable of being positioned such that it is attached to the container bottom ring and the cap top ring to achieve desired stability and balance of the load (Column 3, lines 11-13). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Moraine packaging as modified above, to include a handle and an adjustable strap on the container so that a user transporting the ammunition container has the option to either hand carry the load or carry it on their back with the shoulder strap.

As to claim 4, Moraine does not disclose that the first top member and first bottom member include a male segment or that the second top member and second bottom member include female segments in which the male segments are received to interlock adjacent containers. However, LaBianca discloses that the first members have male segments (LaBianca Fig. 11 where the male portion, defined by the inclined walls

Art Unit: 3728

52, extends into the female portion of the bottom impact ring at reference number 58) and the second members have female segments (Fig. 11, reference number 56) for stackability (Column 2, lines 5-11). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Moraine container to include impact rings with male and female segments, as taught by LaBianca for the purpose of stacking the containers in storage.

As to claim 6, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have at least four impact rings surrounding the Moraine container, since it has been held that mere duplication of essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

As to claim 7, Moraine discloses that the impact rings are octagonal (Moraine Fig. 6 the octagonal rings on both sides of container 55).

As to claim 8, Moraine does not disclose that the cap top ring extends longitudinally to a longitudinal end of the cap or that container bottom ring extends to a longitudinal end of the bottom end. However, LaBianca discloses that the container bottom ring extends to a longitudinal end of the bottom end (LaBianca Fig. 1, see upper left most block/ring 46) and is capable of having the cap top ring (lower right most block/ring 46 of Fig. 1) become a part of the cap (24) (without destroying the cap's function) to better protect the container. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Moraine container to extend the impact rings over the cap top ring and container bottom ring, as taught by



LaBianca, for the purpose of better protecting the ammunition from shock if the container were dropped.

As to claim 9, Moraine does not disclose that the locking mechanism includes a tamper evident member. However, LaBianca discloses a tamper evident means at the connection of the cap and container (LaBianca Fig. 15 the sealing wire extending from reference numbers 66 and 138) to preclude unauthorized access and alert users when the container has been accessed (Column 7, lines 24-33). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Moraine container to include the tamper evident means, as taught by LaBianca, in connection with the locking mechanism, as taught by Baumgardner, to alert users when the lock and tamper evident device have been breached.

As to claim 10, Moraine does not disclose that a locking mechanism pulls the cap longitudinally into the guiding mechanism during an initial locking movement. However, Baumgardner discloses a locking mechanism (Baumgardner Fig. 8, fixed portion 19") that pulls a cap (reference number 12) longitudinally into a guiding mechanism (movable extension in combination with reference number 19'; See Column 3, lines 20-26) to removably secure the end caps to the tubular section. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Moraine container to include a locking mechanism that pulls the cap into the guiding mechanism, as taught by Baumgardner, for a more secure removable fit between the cap and container.

Art Unit: 3728

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moraine et al., (US Pat No 5,779,031) in view of Baumgardner (US Pat No 4,643,302) and LaBianca et al., (US Pat No 4,733,773) as applied to claims 1,2,4,6,7,8,9 and 10 above and further in view of Holsted (US Pat No 5,176,465).

Moraine as modified does not disclose that the male segments are plugs or that the female segments are lateral holes. However, Holsted discloses that it is known to use male plugs and female members (lateral holes) for stacking to save space and prevent misalignment when storing (Holsted Column, lines 13-24 and 60-66).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Moraine container as modified above to replace the male and female stacking components with male plugs and lateral holes, as taught by Holsted, to better align and secure the containers when stacked.

7. Claims 3,11,12,13,14,15,16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moraine et al., (US Pat No 5,779,031) in view of Baumgardner (US Pat No 4,643,302) and LaBianca et al., (US Pat No 4,733,773) as applied to claims 1,2,4,6,7,8,9 and 10 above and further in view of Moore et al., (US Pat No 3,486,451).

As to claim 3, Moraine as modified above does not disclose that the container is coated in fire retardant paint. However, Moore discloses a missile made of several different possible metals coated with a fire resistant material to make the material more accident resistant (Moore Column 4, lines 29-34 and 50-58). Since the container of the present invention is made of metal and relates to ammunition, it seems likely that container could be coated with the same fire resistant paint as the missile described in

Art Unit: 3728

the Moore invention. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Moraine container as modified above, to be coated in a fire retardant paint, as taught by Moore to minimize damage from an accidental explosion of the ammunition stored inside.

As to claim 11, Moraine as modified above, does not disclose that the cap top ring extends longitudinally to a longitudinal end of the cap or that container bottom ring extends to a longitudinal end of the bottom end. However, LaBianca discloses that the container bottom ring extends to a longitudinal end of the bottom end (LaBianca Fig. 1, see upper left most block/ring 46) and is capable of having the cap top ring (lower right most block/ring 46 of Fig. 1) become a part of the cap (24) (without destroying the cap's function) to better protect the container. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Moraine container, as modified above, to extend the impact rings over the cap top ring and container bottom ring, as taught by LaBianca, for the purpose of better protecting the ammunition from shock if the container were dropped.

As to claim 12, Moraine as modified above, does not disclose that the locking mechanism includes a tamper evident member. However, LaBianca discloses a tamper evident means at the connection of the cap and container (LaBianca Fig. 15 the sealing wire extending from reference numbers 66 and 138) to preclude unauthorized access and alert users when the container has been accessed (Column 7, lines 24-33).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Moraine container, as modified above, to include the tamper

Art Unit: 3728

evident means, as taught by LaBianca, in connection with the locking mechanism, as taught by Baumgardner, to alert users when the lock and tamper evident device have been breached.

As to claim 13, Moraine, as modified above, does not disclose that a locking mechanism pulls the cap longitudinally into the guiding mechanism during an initial locking movement. However, Baumgardner discloses a locking mechanism (Baumgardner Fig. 8, fixed portion 19") that pulls a cap (reference number 12) longitudinally into a guiding mechanism (movable extension in combination with reference number 19'; See Column 3, lines 20-26) to removably secure the end caps to the tubular section. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Moraine container, as modified above, to include a locking mechanism that pulls the cap into the guiding mechanism, as taught by Baumgardner, for a more secure removable fit between the cap and container.

As to claim 14, Moraine, as modified above, does not disclose a handle attached to the container along its longitudinal axis or a removable and adjustable shoulder strap. However, Baumgardner discloses a handle along the longitudinal axis of the container (Baumgardner Fig. 12, reference number 25) for hand carrying and an adjustable and removable strap capable of being positioned such that it is attached to the container bottom ring and the cap top ring to achieve desired stability and balance of the load (Column 3, lines 11-13). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Moraine packaging as modified above, to include a handle and an adjustable strap on the container so that a

Art Unit: 3728

user transporting the ammunition container has the option to either hand carry the load or carry it on their back with the shoulder strap.

As to claim 15, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have at least four impact rings surrounding the modified Moraine container, since it has been held that mere duplication of essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

As to claim 16, Moraine discloses that the impact rings are octagonal (Moraine Fig. 6 the octagonal rings on both sides of container 55).

As to claim 17, Moraine, as modified above, does not disclose that the first top member and first bottom member include a male segment or that the second top member and second bottom member include female segments in which the male segments are received to interlock adjacent containers. However, LaBianca discloses that the first members have male segments (LaBianca Fig. 11 where the male portion, defined by the inclined walls 52, extends into the female portion of the bottom impact ring at reference number 58) and the second members have female segments (Fig. 11, reference number 56) for stackability (Column 2, lines 5-11). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Moraine container, as modified above, to include impact rings with male and female segments, as taught by LaBianca for the purpose of stacking the containers in storage.

8. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moraine et al., (US Pat No 5,779,031) in view of Baumgardner (US Pat No 4,643,302), LaBianca

Art Unit: 3728

et al., (US Pat No 4,733,773) and Moore et al., (US Pat No 3,486,451) as applied to claims 1,3,11,12,13,14,15,16, and 17 above and further in view of Holsted (US Pat No 5,176,465).

As to claim 18, Moraine as modified does not disclose that the male segments are plugs or that the female segments are lateral holes. However, Holsted discloses that it is known to use male plugs and female members (lateral holes) for stacking to save space and prevent misalignment when storing (Holsted Column, lines 13-24 and 60-66). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Moraine container as modified above to replace the male and female stacking components with male plugs and lateral holes, as taught by Holsted, to better align and secure the containers when stacked.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Martin (US Pat No 4,762,222) discloses a metal container for ammunition. Rueppel (US Pat No 2,052,491) discloses the stackability of an ammunition container.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven B. Pollicoff whose telephone number is (571)272-7818. The examiner can normally be reached on M-F: 7:30A.M.-4:00P.M.

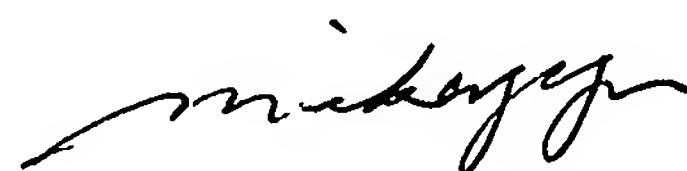


Art Unit: 3728

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mickey Yu can be reached on (571)272-4562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 2/21/06  
SBP



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